

# *Berrycraft*

## FINISHES

DETAILED INFORMATION  
*for* ARCHITECTS



LOCAL REPRESENTATIVE

**BERRY BROTHERS** <sup>INC.</sup>  
Varnishes Enamels Lacquers  
*Detroit, U.S.A. Walkerville, Canada*

# BERRY BROTHERS, INC.

Manufacturers of Architectural Finishes, Paints, Stains, Varnishes, Enamels  
Lacquers, Bleachers of Shellac

FACTORY AND MAIN OFFICE

211 Leib Street  
DETROIT, MICH.

## BRANCHES

NEW YORK, N. Y., 129 26th Street (Brooklyn)  
BOSTON, MASS., 21 Power House Street  
PHILADELPHIA, PA., 331 North 4th Street  
PITTSBURGH, PA., 5707 Friendship Avenue

CHICAGO, ILL., 117-19 West Grand Avenue  
CINCINNATI, OHIO, 130 West Court Street  
ST. LOUIS, MO., 4363 Duncan Avenue  
LOS ANGELES, CAL., 1864 West Washington Street

SAN FRANCISCO, CAL., 252-56 First Street

CANADIAN FACTORY: WALKERVILLE, ONT.

SOLD IN THE PRINCIPAL CITIES OF THE WORLD

## (1) The Company

Berry Brothers were established in 1858 and the experience of over seventy (70) years of continuous business has built an enviable reputation as manufacturers of high grade paints and varnishes. The formulas and methods of manufacture are time tested. The various brands have been well and favorably known over a period of time sufficient to guarantee their durability and reliability to the discriminating architect.

## (2) Reliability

The Company's rating in Bradstreet's and Dun's is over \$1,000,000—first grade of credit.

## (3) Manufacturing Facilities

The plant, one of the largest in the country, is thoroughly modern in all its equipment facilities. The "mass-action" ageing or ripening facilities consist of a combined tankage capacity of one and one-half million (1,500,000) gallons.

*Note: In the manufacture, especially of varnishes, color varnishes and enamels, the ageing or ripening in the mass is essential for completion of chemical changes necessary for stability and uniformity. The results of this process cannot be produced by any artificial means. Dependent on the grade of the particular product, this ageing process must be maintained for from 3 to 12 months.*

The architect may rest assured that where essential to produce the best in quality, all materials bearing a Berry Brothers' brand are thoroughly aged in the mass before they leave the factory.

## (4) Laboratory Control

More important than the manufacturing facilities is the chemical laboratory control of all products, from the purchase of the raw materials which must fulfill rigid laboratory specifications, to the control and constant inspection and supervision of all manufacturing processes. Berry Brothers maintain a group of chemical laboratories, each having a distinct function confined to a particular branch of the industry, such as the manufacture of paints, varnishes, lacquers, shellac, color varnishes and enamels, etc. Most important of these is the Laboratory of Analytical Research and Manufacture wherein new materials and methods are analyzed and formulas are perfected before a product is merchandised under the Berry Brothers name.

The various laboratories and the personnel of trained paint chemists is under the supervision of a chief chemist of wide experience.

The facilities of these laboratories are at all times accessible to the architect for advice and assistance.

## (5) Architectural Finishing Department

The factory maintains a practical finishing department where samples of finish and color may be developed to meet

particular needs. We solicit the opportunity to co-operate with the architect in establishing standards of quality, color, etc., to meet his requirements.

## (6) How to Select Paints, Varnishes and Lacquers

Particularly in the selection of paints, varnishes and nitro-cellulose products is the reputation and experience of the manufacturer of first importance. Chemical analysis is practically impossible and only in the selection of well known brands of known quality can assurance of high quality and durability be obtained.

*Note: The durability of varnish, for example, depends in addition to the careful selection of the materials, more especially on the treatment of the material and particularly treatments involving heat. Varnish and lacquer deterioration results chiefly from chemical change—the more successful the process of manufacture has been in forming stable compounds the more assurance is there that no further change will take place on exposure.*

Only those products which involve no extensive chemical change can be successfully analyzed and duplicated on a laboratory scale. Products which require high temperature or long "mass-action" ripening cannot be analyzed and so duplicated. Chemical analysis of varnish, therefore, is not possible. Metallic salts and volatile constituents can be separated and determined, and from the presence of certain inorganic compounds the use of some materials may be indicated, but these furnish little to indicate the actual quality of the varnish.

The specifying of varnish ingredients is of no practical use since in the completed product the original ingredients do not exist and different treatments of the same materials invariably yield different products.

Physical tests afford the only trustworthy means of determining quality and durability and the tests of actual use and time are the only practical guide.

Care should be exercised in selecting the right product or brand for its particular use and here the manufacturer's recommendations, backed by intimate experience, should be the guide.

## (7) Local Service

In all important centers there is accessible an experienced local representative thoroughly familiar with Berry Brothers' products. His services and recommendations may be obtained not only in assisting to select materials best adapted to the particular use, but he is available to the architect, without cost, in obtaining satisfactory samples of finish and color and the practical supervision of work on the site.

## (8) Technical Information

The general technical information given in this catalogue has been assembled from the data compiled and published by The American Paint and Varnish Manufacturers' Association, Inc., and may, therefore, be considered unbiased and authentic.



## (A) BERRY BROTHERS ARCHITECTURAL FINISHES—DESCRIPTION

### (A1) Lionoil (Clear and Colored)

*Note: See (B10j) for specification application index.*

**General**—An exclusive Berry Brothers formula resulting in a product of remarkably wide adaptability as a waterproof rust and corrosion preventive for metals and a waterproof sealer for wood, cement, brick, etc. Made of a combination of several oils and varnish gums treated at high temperatures, its adhesive, penetrating, waterproof and wear-resisting qualities recommend it for wide architectural use. While the finished surface is hard and tough, it maintains a high degree of elasticity—it will not check, peel or flake off under the severest weather conditions.

*Note: Lionoil has found its staunchest advocate in the airplane industry, both here and abroad, due to its efficient protection of duralumin against deteriorating influences of dampness, sea water and even acids. It is used on steel tubular frame work, ribs, spars and wooden parts. The largest builders of small boats, canoes, speed boats and similar craft use Lionoil as a waterproof sealer for wood both on the inside and outside of the hulls. It acts as a binder for succeeding coats of spar varnish or lacquer, and saves one coat of spar. The world's largest builder of metal boats is a large user of Lionoil.*

(A1a) **Lionoil Clear**—A clear amber liquid (transparent).

(A1b) **Lionoil Colored**—Made in black and white and six attractive standard colors.

**Adaptability**—Exterior and interior metal, wood, cement, plaster, brick, etc.

**Surface Appearance**—Low velvet lustre.

**Drying**—Dust free in 2 hours, hard in 12 hours under proper drying conditions.

**Covering Capacity**—Brush applied, from four hundred (400) to six hundred and fifty (650) sq. ft. per gallon depending on surface.

**Application**—Lionoil Clear may be applied with a brush, or by dipping or spraying processes. On floors it may be applied with a mop. Lionoil Colored is for brush or spray application.

**Cost**—The "colored" costs approximately the same as pure lead and oil.

### (A2) Lionoil Floor Enamel—Quick Drying (Gloss)

*Note: See (B10k) for specification application index.*

**General**—A quick drying waterproof gloss enamel with a Lionoil base (see (A1)). A rust preventative enamel for metals and a moisture-proof, durable, wear-resisting enamel for wood, cement, etc., under hard use and severe exposure.

**Colors**—Made in nine attractive standard colors and black and white.

**Adaptability**—Exterior and interior metal, wood, cement, brick, etc.

**Surface Appearance**—Gloss.

**Drying**—Dust free in one hour, hard in four hours under proper drying conditions.

**Covering Capacity**—Brush applied over smooth surface, four hundred (400) sq. ft. per gallon.

**Application**—Brush application advocated. Is free flowing and leaves no brush marks.

### (A3) Lionoil Metal Trim Enamel (Semi-gloss)

*Note: See (B10l) for specification application index.*

**General**—A high grade metal enamel with a Lionoil base (see (A1)). It adheres tenaciously to bare metal or priming coat, is a rust preventive, and resists the action of water, heat and extreme cold. It dries hard where often there is difficulty with lead and oil.

(A3a) **Lionoil Metal Trim Enamel—Exterior**—For exterior use.

(A3b) **Lionoil Metal Trim Enamel—Interior**—For interior use.

**Colors**—Both exterior and interior, made in two standard colors, dark golden brown and telephone green. Special colors will be made on quantity orders (50 gal. or over).

**Adaptability**—Exterior and interior metal doors and trim, sheet metal and steel windows, steel and cast iron stairs, ornamental iron, etc.

**Surface Appearance**—Semi-gloss, so closely resembling baked enamel as to be commonly mistaken for it.

**Drying**—Dust free in two hours, hard in ten hours under proper drying conditions.

**Covering Capacity**—Brush applied over smooth surface, six hundred (600) sq. ft. per gallon.

**Application**—Brush or spray. Flows out perfectly showing no brush marks.

### (A4) Berrycraft House Paint (Lionoil Processed)

*Note: See (B10n) for specification application index.*

**General**—The highest grade of paint made under the supervision of experts who know the service required. The best materials obtainable are used. The white is made of pure carbonate of lead, pure zinc (French Process) refined linseed oil and Lionoil (see (A1)). The process of grinding and mixing is of the very latest and best. The colors used are finely ground, and thoroughly mixed.

**Adaptability**—Made to meet present day demands and building conditions. Particularly adapted for all exterior exposed surfaces. Made to endure wind, sun, rain, snow, ice and salt air.

**Colors**—Made in 24 standard colors and in Outside White • (Gloss).

**Surface Appearance**—A pleasing gloss.

**Drying**—Sets in 18 to 24 hours under normal drying conditions. Should not be recoated in less than 48 hours.

**Covering Capacity**—300 to 400 sq. ft. per gal., according to the surface to be covered.

**Application**—Applied with brush or spray.

### (A5) Berrycraft Interior Finish (Gloss)

*Note: See (B10o) for specification application index.*

**General**—A high grade gloss finish for painting all interior surfaces. Washable, easy to apply, durable and economical.

**Adaptability**—For use on all woodwork, plaster, wall-board, etc.

**Colors**—Made in white and eight colors.

**Surface Appearance**—A beautiful lustre.

**Drying**—Sets dust free in 6 to 8 hours and dries hard in 18 hours.

**Covering Capacity**—Four hundred (400) sq. ft. per gal.

**Application**—Applied with brush or spray.

### (A6) Berry Brothers Mill White (Gloss, Eggshell, Flat)

*Note: See (B10m) for specification application index.*

**General**—A smooth, light reflecting, washable, elastic finish of reasonable cost for interior brick, concrete, plaster and wood surfaces. It is made by an exclusive process and should not be confused with ordinary paint. Due to its smooth surface which resists the adherence of small dust particles to a surprising degree, Berry Brothers' Mill White remains clean much longer than a surface covered with ordinary white paint. Since it does not chip and crack a renewal coat may be applied over the old.

**Color**—A pure, radiant white.

**Adaptability**—Especially adapted to industrial buildings where light reflecting walls and ceilings save expense in artificial light and increase visibility, efficiency and cleanliness. May be used economically to advantage in other classes of buildings for similar purposes.

**Surface Appearance**—Gloss, Eggshell or Flat.

**Drying**—Dust free in four hours, hard in twenty-four hours under proper drying conditions.

**Covering Capacity**—Six hundred (600) square feet of wood surface and approximately four hundred (400) square feet of brick or concrete surface per gallon.

**Application**—Brush or spray.



**(A7) Stains (Oil and Acid)**

*Note: See (B10p) for specification application index.*

**(A7a) Berrytone Penetrating Oil Stains**—These stains strike deeply into the wood without raising the grain, producing a solid uniform surface. They may be brushed on, but as in all staining operations, wiping-in always produces a more uniform color tone.

Made in twelve (12) standard stains. Special stains made when required to produce special effects.

*Note: Oil stains are not as permanent or as clear in tone as acid stains. Penetrating oil stains contain ingredients which will affect varnish unless sealed with a coat of pure shellac.*

**(A7b) Berry Brothers Acid or Water Stains**—These stains penetrate deeply and are clear in tone and permanent. They should only be used on new wood. Water stains tend to raise the grain of the wood which necessitates sanding. The addition of a small quantity of denatured alcohol to acid or water stains will greatly reduce the grain raising tendency. Made in twenty (20) standard stains. Special stains made when required to produce special effects.

*Note: Acid stains on veneered surfaces, especially where the veneer is thin, may affect the glue unless waterproof glue is specified, which is advocated.*

**(A8) Berry Brothers Paste Wood Filler (Light and Dark)**

*Note: See (B10q) for specification application index.*

**General**—For filling or leveling the surface on open-grain wood under varnish or clear lacquer finish. Furnished in "Light" or "Dark" which may be colored to suit any special effect. Applied with a brush. For varnish finish, paste wood filler should be thinned or reduced with turpentine or turpentine substitute. For lacquer finish, pyroxylin paste wood filler must be specified or the paste wood filler reduced with lacquer thinner.

*Note: Ordinary turpentine or benzine thinned paste fillers are acted upon by the solvents in the lacquer which constantly dry out the oil in the filler resulting eventually in the grain of the wood showing as though no filler had been used. Paste wood fillers thinned with pyroxylin thinner, for use with clear lacquer, creates an affinity between the two materials.*

**(A9) Berrycraft Liquid Wax**

*Note: See (B10s) for specification application index.*

**General**—Made from the highest grade imported wax obtainable. Heavy bodied. Maximum protection for wood, cork tile, linoleum and other composition floors from the wear of heavy traffic.

**Adaptability**—Particularly adapted for use in offices, schools and other public buildings.

**Application**—Applied with brush or mop. Polishes easily with any good polisher.

**(A10) VARNISHES**

*Note: See (B10t) for specification application index.*

**(A10a) Berryspar (Gloss)**

**General**—A high grade spar varnish of unusual characteristics. It has the same wearing qualities as the regular long oil spar varnish, but with the advantage that it is quick drying. For interior use it may be rubbed. It is moisture resisting and will not turn white.

**Color**—Light or pale.

**Adaptability**—Exterior and interior wherever exposed to the elements or subject to moisture, such as exterior doors, interior of wood windows and trim, baseboards, furniture, etc.

**Surface Appearance**—Gloss or may be rubbed dull.

**Drying**—Dust free in 2 hours, hard in 8 hours under proper drying conditions.

**Covering Capacity**—Six hundred (600) sq. ft. per gallon.

**Application**—Applied with a brush or spray.

**(A10b) Luxeberry Wood Finish (Gloss)**

**General**—An interior cabinet rubbing varnish of the highest quality.

**Color**—Light or pale.

**Surface Appearance**—"Gloss," which may be rubbed to an eggshell finish.

**Drying**—Dust free in three hours, hard in eight to ten hours under proper drying conditions.

**Covering Capacity**—Six hundred (600) sq. ft. per gallon.

**Application**—Applied with a brush or spray.

**(A10c) Liquid Granite Floor Varnish (Gloss and Dull) Also "Quick Drying" (Gloss and Dull)**

**General**—An extremely tough and durable interior floor varnish of the highest quality. It is so elastic that the wood may dent under a blow, but the varnish will not crack. Can be rubbed.

Liquid Granite "Dull" contains no wax and is as durable as the "Gloss."

**Color**—Medium light.

**Adaptability**—Floors in the best class of work and on interior standing trim where the greatest in durability is demanded such as public and semi-public buildings, schools, etc. Advocated for stair treads, baseboards and similar parts in all classes of work where the wear is severe.

**Surface Appearance**—"Gloss," which may be rubbed dull. "Dull," dries flat without rubbing. "Semi-gloss," which closely resembles rubbed finish by blending Gloss (1 part) and Dull (3 parts).

**Drying**—Dust free in 4 hours, hard in 10 hours under proper drying conditions.

*Note: Liquid Granite Floor Varnish—Quick Drying dries dust free in 1 hour and hard in 4 hours.*

**Covering Capacity**—Six hundred (600) sq. ft. per gallon.

**Application**—Applied with a brush or spray.

**(A11) LACQUERS (CLEAR SPRAYING)**

*Note: See (B10u) for specification application index*

**General**—Berryloid Clear Lacquers are supplied at spraying consistency and are to be applied full body (unless specially otherwise specified by the manufacturer).

They produce a particularly durable, hard, transparent surface, which when applied over a dry surface will not check or crack but will expand and contract with the surface. May be applied to metal as well as wood.

*Note: All clear lacquer materials must comply with the Government formulas as approved by the Bureau of Standards and must not contain less than 22% of non-volatile constituents, of which 7% must be nitrocellulose—the remainder shall consist of gums and plasticizers properly proportioned to make a balanced lacquer with easy sanding and rubbing qualities. The volatile portion of the lacquer shall be formulated to give the lacquer good spraying characteristics, free from blushing and a minimum of pebble on drying.*

**(A11a) No. 652 Berryloid Clear (Gloss)**

A clear, transparent gloss lacquer for interior cabinet work. Can be rubbed.

**(A11b) No. 653 Semi-gloss Berryloid Clear**

For application over No. 652 Berryloid Clear Lacquer to eliminate the cost of rubbing and especially desirable on carved surfaces where it is impractical to rub the surface to a dull finish. Should always be applied over gloss lacquer undercoat to build sufficient foundation.

**(A11c) No. 653A Eggshell Clear**

Adapted to same uses as No. 653 Semi-gloss except that a dead flat effect is produced.

**(A11d) No. 507 Berryloid Clear Exterior (Gloss)**

A clear, transparent gloss lacquer for exterior use such as exterior doors, trim, etc., and the interior or exterior wood sash, window sills, baseboards, etc., where severe wear and con-



tact with moisture is to be encountered. It is unaffected by rain or the disintegrating action of the sun's rays. Can be rubbed.

**Color**—Light or pale.

**Adaptability**—No. 652 for the highest quality of interior cabinet work either gloss or rubbed finish; No. 653, over clear gloss lacquer to save the cost of rubbing; No. 507, for severe wear and exterior use. Adaptable for all classes of work.

**Surface Appearance**—No. 652 and 507, high gloss. No. 653, semi-gloss which closely resembles a rubbed surface. 653A Eggshell.

**Drying**—Dust free in 10 minutes, hard in one hour under proper drying conditions.

**Covering Capacity**—Three to four hundred (300-400) sq. ft. per gallon.

**Application**—Spray only, using from 60 to 80 pounds air pressure.

## (A12) ENAMELS

*Note: See (B10v) for specification application index.*

### (A12a) Berry's Enamel Undercoat (Semi-flat)

**General**—A triple-ground undercoat for enamels of the highest quality. It has great opacity and flows so smoothly without brush marks that it requires when properly applied little or no sanding to provide a perfect surface for the enamel.

**Colors**—Made in white to be colored to match the enamel coats. Can be obtained colored to match the standard enamels old ivory and rich cream or in special colors where quantity warrants (50 gals. or over).

**Adaptability**—As undercoats for the highest type of enamel finish.

**Surface Appearance**—Semi-flat.

**Drying**—Dust free in 3 hours, hard in 8 hours under proper drying conditions.

**Covering Capacity**—Five hundred (500) sq. ft. per gallon.

**Application**—Applied with a brush or spray.

### (A12b) Luxeberry Enamel (Gloss and Eggshell)

**General**—A long-oil, rubbing enamel of the highest quality. Produces a smooth tilelike surface, easily kept clean.

**Colors**—Made in white, old ivory and rich cream.

**Adaptability**—Exterior and interior woodwork trim in the best class of work. Also for plaster surfaces in bathrooms, kitchens, etc.

**Surface Appearance**—High Gloss which may be rubbed dull. Eggshell (semi-gloss) which closely resembles a rubbed finish, without the expense of rubbing.

**Drying**—Dust free in 4 hours, hard in 24 hours under proper drying conditions.

**Covering Capacity**—Six hundred (600) sq. ft. per gallon.

**Application**—Applied with a brush or spray. It is full bodied, flows freely without brush marks.

### (A12c) Berrycraft Quick Drying Enamel (Gloss)

**General**—A durable new process, quick drying enamel of great opacity. It is not a lacquer—has no disagreeable odor or unusual fire hazard and requires no special thinner. Berrycraft Enamel is waterproof and is unaffected by heat or cold. May be rubbed.

**Colors**—Made in black and white and twelve (12) attractive colors.

**Adaptability**—Made to meet the modern demand for speed for both exterior and interior use. Particularly adapted for apartments, hotels, etc., for both interior trim, plaster and furniture. Adaptable for use on wood, cement, metal, brick and plaster.

**Surface Appearance**—Gloss which may be rubbed dull.

**Drying**—Dust free in a few minutes, hard enough to recoat in four (4) hours under proper drying conditions.

**Covering Capacity**—Six hundred (600) sq. ft. per gallon.

**Application**—Applied with a brush or spray. Brushes on easily without brush marks or laps.

### (A12d) Berry's Radiator Enamel (Flat)

*Note: See (B10v4) for specification application index.*

**General**—A special enamel designed to increase the efficiency of radiators by at least 20% without burning more fuel. Does not lose efficiency when applied over sound old finish. Wears well, is unaffected by heat and is washable. Will not chip or flake.

*Note: Tests made in the Engineering Department of the University of Michigan prove that the correct radiator enamel in the proper colors, increases heat transmission. Radiators painted with flake metal pigments (aluminum, gold or bronze) stand seventh. These same finishes covered with Radiator Enamel immediately increase the radiator's efficiency. Tests also prove that flat enamel radiates more heat than gloss. The remarkable fact is that the color of the enamel, likewise plays an important part. The University tests show color efficiency in the following order:*

*(1) Flat white enamel (2) Cream flat enamel (3) Red flat enamel (4) Green flat enamel (5) Yellow flat enamel (6) Black flat enamel (7) Aluminum flat enamel (8) Brown flat enamel (9) Bare iron flat enamel.*

**Color**—Made in white only which may be tinted with Berrycraft Pure Colors Ground in Oil.

**Adaptability**—Radiation, whether exposed or concealed, exposed piping and connections.

**Surface Appearance**—Flat.

**Drying**—Dust free in 2 hours, hard in 6 to 8 hours under proper drying conditions.

**Covering Capacity**—Four hundred and fifty (450) sq. ft. per gallon.

**Application**—Applied with a brush or spray. Flows out leaving no brush marks.

## (A13) PLASTER PAINTS

*Note: See (B10w) for specification application index.*

### (A13a) Berryflat

**General**—An oil paint wall finish made of the best raw materials. Produces a hard, non-porous surface that wears and washes remarkably well. One (1) coat over Delitone Sealer or equal parts of Lionoil Clear and Berryflat as a sealer.

**Color**—Made in white only to be colored as desired with Berrycraft Pure Colors Ground in Oil.

**Adaptability**—Interior plaster surfaces.

**Surface Appearance**—Soft, lustrous eggshell which may be stippled.

**Drying**—Dust free in 2 hours, hard in 6 to 8 hours under proper drying conditions.

**Covering Capacity**—Five hundred (500) sq. ft. per gallon.

**Application**—Brush or spray.

### (A13b) Delitone and Delitone Thinner (Semi-gloss)

**General**—This material comes in paste form and when used with Delitone Thinner, produces an excellent sealer for plaster surfaces. Two coats produce a tough elastic, non-porous finish.

Pencil marks, ink spots and match scratches can be easily removed from this finish without impairing its lustre. Takes an excellent stipple finish.

Its excellent appearance may be maintained for years by periodic washing.

**Color**—Made in white only (not blued) readily tinted to any shade with Berrycraft Pure Colors Ground in Oil.

**Adaptability**—Interior plaster brick and cement surfaces in the best work.

**Surface Appearance**—Semi-gloss. Takes an excellent stipple finish.

**Drying**—Dust free in 4 hours, hard in 24 hours under proper drying conditions.

**Covering Capacity**—Seven hundred and fifty (750) sq. ft. per gallon, first coat; six hundred (600) sq. ft. per gallon, second coat.

**Application**—Brush or spray.



## (B) PAINTING AND FINISHING—MASTER SPECIFICATIONS

*Note: Notes in italics are explanatory or advisory only and should not be included in the specifications.*

*Note: The scope of this specification covers conditions ordinarily encountered. Select and include only those clauses which apply to the particular work supplemented by special conditions or topics not herein included. Local ordinances and trade customs should be considered.*

### (B1) General Conditions

(B1a) The general conditions governing the General Contract apply to the work under this division—see pages (.....).

*Note: The American Institute of Architects' standard form of general conditions is advocated.*

### (B2) Work Included

(B2a) The work included under this heading shall be the painting and finishing of the following:

*Note: Here give the general scope of the work such as exterior and interior woodwork; exterior and interior brick, concrete, stucco; exposed steel; iron and sheet metal; plaster walls and ceilings, etc.*

(B2b) The following items are furnished by the manufacturer completely finished and require no further finish under this contract.

*Note: Here list such items as vault doors, metal doors and trim, metal stall partitions, metal cabinets, special cabinet work, fixtures, etc.*

### (B3) Exterior Painting Conditions

*Note: Since not only the appearance but the life of the painter's finish is materially affected by the weather conditions the following provisions are desirable. Exterior painting should only be done in dry, mild seasons.*

(B3a) Paint shall not be applied in moist or humid weather. No paint shall be applied in temperatures below 50° F. or in extreme heat.

### (B4) Condition of the Building

*Note: Since not only the appearance but the life of the painter's finish is materially affected by the condition of the building, over which the painting contractor has no jurisdiction, the following provisions are desirable for the protection of this contractor. The carrying out of these provisions should be allocated under the proper contract in other specification divisions.*

#### (B4a) (Short Form)—

(B4a1) During the application of painter's finish effective working conditions will be maintained as to absence of dampness and humidity; uniformity of temperature (70° F.); ventilation necessary to assist drying; elimination of dust producing operations (other than sanding). The absence of fire hazards shall be maintained.

#### (B4b) (Detailed Form)—

(B4b1) *Elimination of Dampness*—No interior painter's finish shall be applied until the building (particularly plaster) is thoroughly dry.

(B4b2) *Temperatures*—A uniform temperature of approximately 70° F. will be maintained day and night during the application of painter's finish. Finish shall not be applied in summer in extreme heat or under damp, humid conditions. Paint store rooms will be maintained approximately 70° F. Painter's finish shall be at room temperature before application.

(B4b3) *Ventilation*—Proper ventilation will be maintained to carry off the volatile gases and promote drying.

(B4b4) *Dust Prevention*—Absence of dust (other than sanding) induced by sweeping or work by other trades will be maintained.

(B4b5) *Fire Safeguards*—Smoking is prohibited in paint store and mixing rooms or rooms where painter's finish is being applied. All paints and finish containers shall, when not in use, be kept sealed or covered. All oily waste, rags, etc., shall be collected each day and, unless destroyed, temporarily stored in tight covered metal containers to prevent spontaneous combustion.

### (B5) Scaffolding

(B5a) This contractor shall provide and erect all scaffolding, staging, etc., necessary for the proper execution of his work.

(B5b) He shall co-operate with other trades to the extent that erection of scaffolding shall not conflict with the execution of other work immediately preceding or carried in, without undue conflict, simultaneously with the painting and finishing.

(B5c) If, after due authority has been granted to erect scaffolding, it is necessary to remove parts therefore for the accommodation of others, demolition and re-erection shall be done only after allocation of the cost thereof, if any, has been equitably adjusted.

### (B6) Protection

(B6a) This contractor shall furnish and lay drop cloths, so placed as, at all times, to adequately protect floors and other surfaces from spatter and droppings.

(B6b) This shall include the protection of all (fixed furniture and equipment) (movable furniture) (specify), etc.

(B6c) The canopies of all lighting fixtures shall be unscrewed and set away from the surface to be finished and the fixtures adequately covered and protected from injury.

(B6d) Remove all electric switch plates and similar equipment before painting and finishing and replace in as good condition as found.

(B6e) Damage done to the building, fixtures or equipment, through lack of protection, accident or carelessness incident with work under this contract shall be satisfactorily repaired or made good by replacement at this contractor's expense.

### (B7) Cleaning

(B7a) At completion remove all spots, stains, oil, etc., attributable to work under this contract, from (walls) (ceilings) (trim) (floors) (furniture) (fixtures) (hardware) (glass) (specify) and leave in as good condition as found.

## (B8) CONDITION OF SURFACES—PRELIMINARY PROVISIONS

*Note: Since not only the appearance but the life of the painter's finish is materially affected by the condition of the surfaces to be finished over which the painting contractor has no jurisdiction, the following provisions are desirable for the protection of this contractor. The carrying out of these provisions should be allocated under the proper contract in other specification divisions.*

### (B8a) General

(B8a1) All surfaces to be finished under this contract shall be clean and dry.

(B8a2) Any surface not in suitable condition to receive the finish contemplated shall be reported to the architect or his authorized agent before work is commenced.

(B8a3) Application of the first coat of finish shall be construed as acceptance by this contractor of the surface to be finished.

### (B8b) New Exterior Woodwork

(B8b1) Exterior woodwork is presumed to be of thoroughly seasoned stock, clean and free of surface defects.

(B8b2) Incidental minor cleaning, sanding and dusting of surfaces shall be done by this contractor that these shall be in perfect condition to receive finish.

### (B8c) New Interior Woodwork

(B8c1) (Standing woodwork trim) (wood floors) (specify) etc., are presumed to be clean and sanded smooth, free of machine marks or surface defects and in suitable condition to receive advantageously the painter's finish under this contract.

(B8c2) Incidental necessary minor cleaning, sanding and dusting of surfaces shall be done by this contractor, that these shall be in perfect condition to receive finish.



**(B8d) Old Exterior Woodwork**

*Note: On the condition of the existing paint surface should depend the necessity of its complete removal or its use as a base for new finish.*

(B8d1) Remove all loose paint and dust by scraping, sandpapering, wirebrushing, dusting, etc.

(B8d2) Carefully burn off all existing paint down to the original wood surface without charring. Sandpaper where necessary to leave the surface smooth.

(B8d3) Any necessary carpenters' repairs will be done by others before new painter's finish is applied.

(B8d4) Touch up all abrasions with paint as specified for finish.

**(B8e) Old Interior Woodwork**

*Note: On the condition of the existing finish and the nature of the proposed new finish should depend the necessity of its complete removal or its use as a base for new finish. In the case of clear varnish it is usually advisable to remove the existing finish.*

(B8e1) Remove existing finish with paint remover down to the original wood and sand smooth.

(B8e2) Bleach the woodwork with dilute oxalic acid to restore it as nearly to its original color and condition as possible and when bone dry sand smooth.

*Note: Required only for new varnish finish.*

(B8e3) Wash existing woodwork thoroughly with soap and water to remove all dirt, grease and wax. Dry completely and sand to a smooth surface.

*Note: Required where sound existing finish remains to be refinished with enamels, paints, etc.*

(B8e4) Thoroughly rub down existing woodwork with pumice and water and completely dry.

*Note: Required in good work where sound varnish remains to be refinished with clear varnish. Cleaning with benzine is not sufficient.*

(B8e5) Any necessary carpentry will be done by others before new painter's finish is applied.

(B8e6) Touch up all abrasions with paint as specified for finish.

**(B8f) New Plaster Work**

(B8f1) Remove all dust and sand particles adhering to the surface by dusting, scraping and sandpapering.

(B8f2) Cut or score out all cracks that may have appeared and fill with plaster of paris or prepared patching plaster leveled smooth with a putty knife. When dry, sand smooth. Surface of crack shall match as closely as possible surrounding surface.

(B8f3) Where necessary, sand smooth ornamental plaster work, especially at joints and intersections.

(B8f4) Treat all plaster surfaces with a solution consisting of eight ounces of zinc sulphate to the gallon of clean water and allow to dry at least three (3) days. Remove all loose crystals from the surface before finishing.

*Note: Advocated on all new plaster to neutralize alkali usually prevalent. Phenolphthalein applied by touching the walls at various points turns red if alkali is present.*

**(B8g) Old Plaster Work**

(B8g1) Remove existing (kalsomine) (specify) finish.

(B8g2) Wash thoroughly with soap and water or benzine to remove all dirt and grease. When dry, remove all scale, flakes, blisters, etc., by scraping and sanding. Thoroughly sand smooth the entire surface.

*Note: Use where new finish is applied over existing paint finish.*

(B8g3) Cut or score out all cracks and abrasions and fill with plaster of paris or prepared patching plaster leveled smooth with a putty knife or trowel. When dry sand smooth and shellac. Surface of crack or patch shall match as closely as possible adjacent surfaces.

(B8g4) Touch up all abrasions with paint as specified for finish.

**(B8h) New Metal Work**

(B8h1) Remove all dirt, grease and rust with benzine. Use sandpaper or wire brush if necessary.

(B8h2) Where fluid solder flux has been used, clean thoroughly with benzole.

(B8h3) Galvanized work shall be thoroughly washed with acetic acid (vinegar).

(B8h4) Touch up all abrasions with paint as specified for finish.

**(B8i) Old Metal Work**

(B8i1) Wash thoroughly with soap and water or benzine to remove all dirt and grease. When dry, remove all scale, flakes, blisters, etc., by scraping and sanding. Thoroughly sand smooth the entire surface.

(B8i2) Touch up all abrasions with paint as specified for finish.

**(B9) GENERAL REQUIREMENTS****(B9a) Workmanship**

(B9a1) All labor shall be performed in the best manner by skilled workmen.

(B9a2) All paint shall be thoroughly and smoothly brushed out to a uniform film without runs, sags or brushmarks.

(B9a3) Varnish and enamel shall be flowed on and carefully brushed out to a uniform film without runs, sags or brushmarks.

*Note: A number of properly applied thin coats are much more desirable than a fewer number of heavy coats.*

(B9a4) Each coat of finish shall be given sufficient time to dry hard before application of the succeeding coat.

(B9a5) Immediately prior to the application of each coat, thoroughly dust the surface clean.

**(B9b) Knots, Sap, Etc.**

(B9b1) Cover all knots and all sappy and resinous spots on woodwork to be painted with a coat of shellac, before priming.

**(B9c) Staining**

(B9c1) Stains shall be evenly applied in strict accordance with the manufacturer's specifications to produce the effect required to match in color the approved samples.

(B9c2) Before the application of acid stains, the wood shall be sponged with cold water to raise the grain. When

dry, sandpaper smooth. Apply the acid stain and when dry sand lightly.

**(B9d) Filling**

(B9d1) All open-grain woods shall be filled to produce a level smooth surface. Allow the filler to set but before it has hardened, wipe off (across the grain) any surplus from the surface. When hard, sand lightly. Filler shall be of such color as to produce the effect required to match the approved samples.

*Note: Open-grain woods are Ash, Butternut, Chestnut, Elm, Mahogany, Oak, Rosewood and Walnut. Birch, Gumwood, Maple and Cherry, classed as close-grain woods, will take a filler where desired to accentuate the grain of the wood.*

*Note: See particularly (A8) page 3 for filler used under lacquer.*

**(B9e) Puttying**

(B9e1) All nail holes shall be carefully filled with putty after the first or priming coat of paint or stain. Putty on natural or stained woodwork shall be colored to match the wood or stain.

**(B9f) Sanding**

(B9f1) Each coat of interior finish except the last or finished coat shall, when thoroughly dry and hard, be lightly sanded smooth with fine sandpaper (0, 00, 000 or 0000 as best adapted). Dust clean after each sanding operation.



**(B9g) Rubbing**

(B9g1) Where so specified, the last or finished coat of varnish, lacquer and enamel *when thoroughly hard* shall be uniformly rubbed to a dull finish with 3f powdered pumice stone and water or rubbing oil. Great care shall be exercised that the finished coat shall not be rubbed through on arrises and that there be no bright flecks in depressions of mouldings, carvings, etc.

**(B9h) Storage, Mixing, Etc.**

(B9h1) All material shall be stored and mixed in a clean room kept at a uniform temperature (70° F.) and locked when not in use. Access at all times shall be provided to the architect or his authorized representative.

(B9h2) A sufficient number of unlabeled, clean, covered mixing and storage receptacles shall be provided to properly carry out the work under this contract. All empty receptacles shall be kept scrupulously clean.

(B9h3) Varnish, enamels, etc., shall be kept in full, tightly sealed containers. Remnants from larger cans shall be poured into smaller cans for preservation, the object being to remove air-space.

*Note: The formation of skin or crust on varnish in the can is due to surface oxidation from exposure to the air. Such exposure, even in partly filled sealed containers, per-*

*mits evaporation of volatile ingredients and leads to deterioration.*

(B9h4) All brushes shall be kept clean and in perfect condition when not in use.

(a) Paint brushes when not in use shall be provided with "brush keepers" and remain suspended with bristles immersed in Lionoil or Damar Varnish.

(b) Varnish and enamel brushes when not in use shall be provided with "brush keepers" and remain suspended with bristles immersed in "brush keeper varnish."

*Note: Brush keeper varnish is a finishing varnish made without dryers and therefore practically non-drying. Varnish brushes should not be kept in linseed oil nor in turpentine nor washed with the latter. "Seedy" varnish is usually attributable to brushes washed or kept in turpentine. Proper care of brushes is of the utmost importance.*

**(B9i) Samples**

(B9i1) Complete samples made in accordance with the specifications under the direction of the architect shall be furnished on all work.

(B9i2) Accepted final samples shall be of the size and number required by the architect.

(B9i3) The finished work shall match the accepted samples in color and finish.

**(B10) MATERIALS****(B10a) General**

(B10a1) All material, unless otherwise specially mentioned, shall be of the brand designated as manufactured by Berry Brothers (hereinafter designated B. B.), or equivalent subject to the architect's approval.

(B10a2) Where specific brands are not named, materials in every instance shall be the best of their respective kinds.

(B10a3) All materials shall be delivered at the building in the original cans or containers with seals unbroken and labels attached.

(B10a4) All varnishes and enamels shall be used as they come from the manufacturer without reducing.

*Note: Varnish is a product of chemical reactions at high temperatures. Mixtures of two varnishes or the addition of thinners "in the cold" may induce separations and precipitations certain to affect the quality.*

(B10a5) No material shall be reduced except under the manufacturer's direction and then only with the stipulated reducer used in the quantity and manner recommended.

(B10a6) All paints and stains shall be of colors as selected by the architect. In all cases undercoats shall match the finished coat in color and shade. Only where specifically advocated by the manufacturer shall materials be purchased in the white for subsequent tinting or coloring.

*Note: Coloring pigments all have chemical activity which vary in considerable degree. Normal endurance and appearance can best be assured by maintaining a chemical balance between pigments, oils, driers and other ingredients as well as the careful selection of the ingredients themselves. It is advocated that wherever possible paints of the color or shade required be obtained ready to apply from the manufacturer or of the general color and shade requiring the least addition of color pigments.*

**(B10b) Spraying Equipment**

(B10b1) Spraying equipment shall be of type and capacity best adapted to the work, subject to the architect's approval.

(B10b2) Compressors shall be motor driven.

(B10b3) Compressor shall be set in location designated by the architect and temporary rigid piping shall be installed so as not to conflict with the work of other trades.

(B10b4) All paint carrying flexible hose, nozzles and equipment shall be thoroughly cleaned after each day's work and maintained in first class working condition.

**(B10c) Brushes**

(B10c1) All brushes shall be new and of the best grade, of sizes and types best adapted for the particular work.

**(B10d) Apex Varnish Remover**

*Note: For application see (B8e1).*

**(B10e) Putty**

(B10e1) Putty shall be of the best grade consisting of whiting and pure raw linseed oil.

**(B10f) Linseed Oil**

(B10f1) Linseed oil (raw or boiled as best adapted to the purpose) shall be pure and thoroughly settled, meeting fully the current specifications of the American Society for Testing Materials.

**(B10g) Turpentine**

(B10g1) Turpentine shall be pure gum spirits of turpentine meeting fully the current specifications of the American Society for Testing Materials.

**(B10h) Shellac (B. B.)**

(B10h1) Shellac shall consist of 4½ lbs. of Berry Brothers pure gum shellac (SDC orange or SDC white as so specified) to the gallon of pure (188 proof) denatured grain alcohol.

**(B10i) Coloring Pigments (B. B.)**

(B10i1) Coloring pigments shall be Berrycraft Pure Colors, ground in pure linseed oil.

**(B10j) Lionoil (B. B.)**

*Note: See (A1) Page 2. A rust and corrosion preventive on metals. A moisture proof sealer for wood and for stopping suction on brick, cement or stucco surfaces to be painted. For application see (B11a, d & e) (B12d) (B13a & d) (B14a & d) (B15d & e) (B17b) (B18b3 & b4) (B18c6 & c7) (B18d3) (B18e1) (B19b1, b2 & b3) (19e1) (B19h3) (B20b, d & g) (B22b1) (B22e) (B22c4 & c6).*

**(B10j1) Clear**

*Note: May be covered with spar varnish.*

**(B10j2) Colored**

(A) **Priming Coat**—Add one quart of "clear" to the gallon of "colored."

(B) **Second Coat**—Add one pint of "clear" to the gallon of "colored."

(C) **Third Coat**—Full body as it comes from the can.

*Note: One-half pint of Lionoil Clear added to the gallon imparts an enamel-like gloss finish.*



**(B10k) Lionoil Floor Enamel Quick Drying (Gloss) (B. B.)**

*Note:* See (A2) Page 2. For application see (B15a) (B17b) (B18b4) (B19d2) (B22b1).

**(B10l) Lionoil Metal Trim Enamel (Semi-gloss) (B. B.)**

*Note:* See (A3) Page 2. A moisture-proof rust preventive. For application see (B11c) (B12c) (B13c) (B14c).

(B10l1) Exterior

(B10l2) Interior

**(B10m) Berry Brothers Mill White (Gloss) (Eggshell) (Flat) (B. B.)**

*Note:* See (A6) Page 2. A pure white gloss, semi-gloss or flat cleanable, interior wood, brick, concrete and plaster wall and ceiling paint, particularly adapted for industrial use. For application see (B16).

**(B10n) Berrycraft House Paint (for wood) (B. B.)**

(B10n1) Prepared mixed paint shall be Berrycraft House Paint. The priming, second and third coats shall be applied in accordance with the directions on each can.

*Note:* See (A4) Page 2. Berrycraft House Paint is made of pure carbonate of lead and pure zinc oxide combined in the proper proportions with refined linseed oil and Lionoil Drier. All ingredients are carefully selected, are uniform in quality and machine mixed under ideal conditions assuring not only the maximum in protection, appearance and life, but economy. For application, see (B18b6) (B19b1, d3 & e1).

**(B10o) Berrycraft Interior Finish (Gloss) for Wood, Plaster or Wallboard**

(B10o1) Prepared mixed paint shall be Berrycraft Interior Finish (Gloss). The priming, second and third coats shall be applied in accordance with the directions on each can.

*Note:* See (A5) Page 2. For applications see (B19d4) (B19c1) (B20g).

**(B10p) Stains****(B10p1) Berrytone Penetrating Oil Stains (B. B.)**

*Note:* See (A7a) Page 3. For application see (B18c1 & d1) (B19f1 & h1) (B22c1 & d1).

**(B10p2) Berry Brothers Acid Stains (B. B.)**

*Note:* See (A7b) Page 3. For application see (B18c1 & d1) (B19f1 & h1) (B22c1 & d1).

**(B10q) Paste Wood Filler (B. B.)**

*Note:* See (A8) Page 3. For application see (B18c2 & d2) (B19f2 & h2) (B22c2 & d2).

(B10q1) Use only Pyroxylin Paste Wood Filler or Paste Wood Filler reduced with lacquer thinner under lacquer finishes.

**(B10r) Berrywax (B. B.)**

*Note:* A high grade floor wax. For application see (B22d4).

**(B10s) Berrycraft Liquid Wax (B. B.)**

*Note:* See (A9) Page 3. A heavy bodied wax for wood, cork tile, linoleum and all composition floors. For application see (B22d4).

**(B10t) VARNISHES****(B10t1) Berryspar (Gloss) (B. B.)**

*Note:* See (A10a) Page 3. A quick drying moisture-proof spar varnish for exterior and interior use. For application see (B18c5 & c6) (B19c3 & f5).

**(B10t2) Luxeberry Wood Finish (Gloss) (B. B.)**

(a) To produce Semi-gloss, mix Gloss (1 part) and Dull (3 parts).

*Note:* See (A10b) Page 3. A light colored interior rubbing varnish of highest quality. For application see (B19f7 & f11).

**(B10t3) Liquid Granite Floor Varnish (Gloss) (Dull) (Quick Drying) (B. B.)**

(a) To produce Semi-gloss, mix Gloss (1 part) and Dull (3 parts).

*Note:* See (A10c) Page 3. A floor varnish of the highest quality. Known as "The Million-step-test floor varnish." Use also for standing trim to take severe wear. For application see (B18c7) (B19c3, e4, f6, j8, f10 & g3) (B22c4 & c6).

**(B10u) LACQUERS (CLEAR SPRAYING)****(B10u1) No. 652 Clear (Gloss) (B. B.)**

*Note:* See (A11a) Page 3. Clear gloss for interior cabinet finish. Can be rubbed. For application see (B19h6 & h8).

**(B10u2) No. 653 Semi-gloss Berryloid Clear (B. B.)**

*Note:* See (A11b) Page 3. Clear semigloss to save the cost of rubbing. For application see (B19h8).

**(B10u3) No. 653A Berryloid Clear (B. B.)**

*Note:* See (A11c) Page 3. Clear flat to save the cost of rubbing. For application see (B19h8).

**(B10u4) No. 507 Berryloid Clear Exterior (Gloss) (B. B.)**

*Note:* See (A11d) Page 3. Clear gloss for exterior use and for interior use where there is severe wear or moisture is prevalent. Can be rubbed. For application see (B18d4) (B19h5).

**(B10v) ENAMELS**

*Note:* See (B10k) for Lionoil Floor Enamel and (B10l) for Lionoil Metal Trim Enamel.

**(B10v1) Berry's Enamel Undercoat (B. B.)**

*Note:* See (A12a) Page 4. An opaque interior enamel undercoat of highest quality. For application see (B18c3) (B19i1 & i7) (B20b).

**(B10v2) Luxeberry Enamel (Gloss) (Eggshell) (B. B.)**

*Note:* See (A12b) Page 4. An interior rubbing enamel of highest quality. For application see (B18c4 & c6) (B19i3, i6 & i7) (B20b).

**(B10v3) Berrycraft Quick Drying Enamel (Gloss) (B. B.)**

*Note:* (A12c) Page 4. A quality enamel for use where time is the element. For application see (B19i4).

**(B10v4) Berry's Radiator Enamel (Flat) (B. B.)**

*Note:* See (A12d) Page 4. A special heat resisting flat radiator enamel. For application see (B21c).

**(B10w) PLASTER PAINTS****(B10w1) Berryflat (B. B.)**

*Note:* See (A13a) Page 4. A high grade semi-flat wall paint. For application see (C20d).

**(B10w2) Delitone and Delitone Thinner (Semi-gloss) (B. B.)**

*Note:* See (A13b) Page 4. A semi-gloss wall paint of high quality. For application see (C20c).



## (B11) EXTERIOR AND INTERIOR PAINTING AND FINISHING OF STEEL, IRON, ETC.

(B11a) For previous painting at shop and in the field see (give paragraph and page references).

**Note:** Shop and field coats of Lionoil Colored provides exceptional protection.

(B11b) Over shop or field coats previously applied, all exposed surfaces of the following items shall be finished as specified below:

**Note:** Here list items such as exposed steel work columns, trusses, etc.; cast iron and steel stairs; fire escapes, wrought iron and pipe rails; exposed lintels, etc. Where there are a variety of classes or groups of work each requiring a different finish, precede each group with clause (B11b) and list separately followed by the particular specification which applies.

**Note:** Specifications are listed in the general order of desirability, the highest grade first. Select that adapted to the particular work.

(B11c) Two (2) coats of Lionoil Metal Trim Enamel (Exterior) (and) (Interior). Allow not less than 10 hours to dry hard between coats.

(B11d) Two (2) coats of Lionoil Colored. Allow not less than 12 hours to dry hard between coats.

(B11e) Verde Antique Finish—Two (2) coats of Lionoil Colored (Brown) over which apply a glazing coat of Lionoil Light Green, which when partially set shall be partly removed by wiping off or "patting" with a pad of knit cotton goods to imitate Verde Antique Bronze. Allow not less than 12 hours to dry hard between coats. Finish with one (1) coat of Liquid Granite Dull.

## (B12) EXTERIOR AND INTERIOR PAINTING AND FINISHING OF STEEL WINDOWS

(B12a) For previous painting at shop (and in the field) see (give paragraph and page reference).

**Note:** Steel windows should be painted in the field after erection, before glazing. This frequently is done by the erector in which case specify the same material as specified for finish reducing the finish by one (1) coat.

(B12b) Over shop or field coats previously applied, the following items shall be finished as specified below:

**Note:** Here list items. Where there are a variety of classes or groups each requiring a different finish, precede

each group with clause (B12b) and list separately followed by the particular specification which applies.

**Note:** Specifications are listed in the order of desirability, the highest grade first. Select that adapted to the particular work.

(B12c) Two (2) coats of Lionoil Metal Trim Enamel, Exterior and Interior as adapted. Allow not less than 10 hours to dry hard between coats.

(B12d) Two (2) coats of Lionoil Colored. Allow not less than 12 hours to dry hard between coats.

## (B13) EXTERIOR AND INTERIOR PAINTING AND FINISHING OF SHEET METAL WORK

(B13a) For previous painting at shop (and in the field) see (give paragraph and page reference).

**Note:** Shop and field coats of Lionoil Colored provides exceptional protection.

(B13b) All exposed surfaces of the following items shall be finished as specified below:

**Note:** Here list items such as roofing, flashing, ventilators, skylights, sheet metal windows, steel smoke stacks, etc. Where a variety of classes or groups of work each requiring a different finish, precede each group with clause (B13b) and list separately followed by the particular specification which applies.

**Note:** Specifications are listed in the general order of desirability, the highest grade first. Select that adapted to the particular work.

(B13c) Two (2) coats of Lionoil Metal Trim Enamel (Exterior) (and) (Interior). Allow not less than 10 hours to dry hard between coats.

**Note:** Particularly advocated for interior exposed sheet metal work and both exterior and interior of Sheet Metal Windows.

(B13d) Two (2) coats of Lionoil Colored. Allow not less than 12 hours to dry hard between coats.

## (B14) EXTERIOR AND INTERIOR PAINTING AND FINISHING OF METAL DOORS AND TRIM

(B14a) For previous painting at shop (give paragraph and page reference).

**Note:** A shop coat of Lionoil Colored provides exceptional protection.

(B14b) Over shop coat previously applied, all exposed surfaces of metal doors (including tops and bottoms) and trim shall be finished as specified below.

**Note:** Here list items by numbers, reference to schedules, or otherwise.

**Note:** Specifications are listed in order of desirability, the highest grade first. Select that adapted to the particular work.

(B14c) Two (2) coats of Lionoil Metal Trim Enamel (Exterior) (and) (Interior). Allow not less than 10 hours to dry hard between coats.

(B14d) Two (2) coats of Lionoil Colored. Allow not less than 12 hours to dry hard between coats.

**Note:** Adapted to industrial and similar work.

## (B15) EXTERIOR AND INTERIOR PAINTING AND FINISHING OF CEMENT, CEMENT STUCCO, CONCRETE AND BRICK

(B15a) Treat all wall surfaces of (cement) (concrete) (brick) with a wash consisting of 4 lbs. of zinc sulphate crystals to the gallon of water. After the walls are dry, all loose crystals must be removed with a brush.

**Note:** Advocated if alkali is especially strong.

(B15b) **Note:** If walls have been previously finished include clauses (B8g2) and (B8g4).

(B15c) The following surfaces shall be finished as specified below.

**Note:** Here list surfaces to be finished such as exterior stucco, cement or concrete work, brick, etc., in light courts and interior walls and ceilings.

(B15d) One (1) coat of Lionoil Clear and two (2) coats of Lionoil Floor Enamel—Quick Drying each applied with a (brush) (spray). Allow not less than 8 hours to dry between coats.

**Note:** Use where a gloss finish is desired.

(B15e) Two (2) coats of Lionoil Colored, the first coat reduced with a gallon of Lionoil "Clear" to the gallon of Lionoil "Colored." Apply with a (brush) (spray). Allow not less than 12 hours to dry between coats.

**Note:** Use where a semi-gloss is desired.



## (B16) (INDUSTRIAL BUILDINGS) INTERIOR PAINTING AND FINISHING OF WOOD, BRICK, CONCRETE AND PLASTER

(B16a) Treat all wall surfaces of (cement) (concrete) (plaster) (brick) with a wash consisting of 4 lbs. of zinc sulphate crystals to the gallon of water. After the walls are dry, all loose crystals must be removed with a brush.

*Note:* Advocated if alkali is especially strong to prevent the possibility of burning through the finish.

(B16b) *Note:* If walls have been previously finished include clauses (B8g2) and (B8g4).

(B16c) The following surfaces shall be finished:

*Note:* Here list interior surfaces to be finished such as wood columns, beams and ceilings in mill construction; brick walls; concrete walls, columns, beams and ceilings; and plaster walls and ceilings.

(B16d) (One (1)) (two (2)) coats of Berry Brothers Mill White applied with a (brush) (spray). Allow not less than 24 hours to dry between coats.

## (B17) FINISHING CONCRETE FLOORS AND BASES

(B17a) The following concrete floors shall be finished as specified below: *Note:* List and locate.

(B17b) One (1) coat of Lionoil Clear, and two (2) coats

of Lionoil Floor Enamel—Quick Drying. Allow not less than 12 hours to dry between all coats except last two where not less than 4 hours is required.

## (B18) EXTERIOR PAINTING AND FINISHING OF WOOD

(B18a) The following exterior woodwork shall be finished as specified below:

*Note:* Here list items such as exterior woodwork trim, siding, exterior wood window and door frames, exterior side of wood sash and doors, porch floors, etc., and name the wood to be finished. Where there are a variety of classes or groups of work each requiring a different finish, precede each group with clause (B18a) and list separately followed by the particular specification which applies.

### (B18b) PAINT FINISH

(B18b1) Prime all woodwork to be painted with priming paint before or immediately after erection.

(B18b2) This shall include the priming of all backs or unexposed parts of window and door frames.

(B18b3) Prime the pulley stiles and parting beads of double hung wood window frames with a coat of Lionoil Clear only.

(B18b4) Finish exterior wood floors with one (1) coat of Lionoil Clear and two (2) coats of Lionoil Floor Enamel—Quick Drying. Allow not less than 12 hours to dry between first and second coats and not less than 4 hours between the last two coats.

(B18b5) Over the priming coat finish with

(B18b6) Two (2) coats of Berrycraft House Paint.

### (B18c) VARNISH OR NATURAL FINISH

(B18c1) Stain with (oil) (acid) stain. Allow sufficient time to thoroughly dry.

*Note:* Omit on natural finish.

(B18c2) Fill with paste wood filler. Allow not less than 8 hours (more if necessary) to set hard.

*Note:* Omit ordinarily on close-grain wood (see B9d).

(B18c3) Over (stain) (and) (filler) apply a thin coat of (SDC-orange) (SDC-white) shellac and sand lightly.

(B18c4) Finish with

*Note:* Specifications below are listed in the general order of desirability, the highest grade first. Select that adapted to the particular work.

(B18c5) (Two (2)) (three (3)) coats of Berryspar. Allow not less than 8 hours to dry between coats.

(a) The last coat shall be rubbed to a dull finish.

(B18c6) One (1) coat of Lionoil Clear over which shall be applied (one (1)) (two (2)) coats of Berryspar. Allow not less than 8 hours to dry between coats.

(B18c7) Two (2) coats of Lionoil Clear and two (2) coats of Liquid Granite Floor Varnish (Quick Drying) Dull. Allow not less than 8 hours to dry between coats.

*Note:* An excellent finish for half timber work, and similar natural or stained exterior woodwork trim; porch ceilings, etc.

### (B18d) CLEAR SPRAYING LACQUER FINISH

(B18d1) Stain with acid stain. Allow sufficient time to thoroughly dry.

*Note:* Omit on natural finish. Use only acid stains under lacquer.

(B18d2) Fill with paste wood filler. Allow from 24 to 36 hours to set hard.

*Note:* Omit on close-grain wood. Use only Pyroxylin Filler.

(B18d3) Over (stain) (and) (filler) apply a spray coat of Lionoil Clear. Allow not less than 12 hours to dry or completely oxidize before lacquer is applied.

(B18d4) Finish with (two (2)) (three (3)) coats of No. 507 Berryloid Clear Exterior, spray applied. Allow not less than 1 hour to dry between coats.

(B18d5) The last coat shall be allowed to dry for at least 5 hours and shall then be rubbed to a dull finish.

### (B18e) ENAMEL FINISH

(B18e1) Prime all woodwork to be enameled with equal parts of Berryflat and Lionoil Clear priming coat.

(B18e2) *Note:* If exterior window frames and trim are enameled include clauses (B18b2) and (B18b3).

(B18e3) Over the priming coat, apply two (2) coats of Berry's Enamel Undercoat. Allow not less than 8 hours to dry between coats.

(B18e4) Over undercoats apply (two (2)) (three (3)) coats of Luxeberry Enamel Gloss. Allow not less than 3 days to dry between coats.

(B18e5) The last coat shall be rubbed to a dull finish.

(B18e6) Over undercoats apply (one (1)) (two (2)) coats of Luxeberry Enamel, Gloss, finished with (one (1)) coat of Luxeberry Enamel Eggshell) (one (1) coat consisting of equal parts of Berry Enamel Undercoat and Luxeberry Enamel Gloss).

*Note:* Choose finish coat. Either produces an eggshell finish without rubbing.



**(B19) INTERIOR PAINTING AND FINISHING OF STANDING WOODWORK**

(B19a) The following interior woodwork shall be finished as specified below.

**Note:** Here list items of standing woodwork trim, etc., and name the wood to be finished. Where there are a variety of classes or groups of work each requiring a different finish, precede each group with clause (B19a) and list separately followed by the particular specification which applies.

**(B19b) BACK PAINTING, SHELVING, INSIDE OF DRAWERS, CUPBOARDS, ETC.**

(B19b1) The unexposed back of all standing interior woodwork coming in contact with plaster shall be given (one (1)) (two (2)) coats of (Lionoil Clear) (Berrycraft House Paint priming coat).

(B19b2) The inside of all (drawers) (cupboards) and all shelving shall be given (one (1)) (two (2)) coats of Lionoil Clear.

(B19b3) After wood doors have been fitted and hung give the tops and bottoms two (2) coats of Lionoil Clear.

**(B19c) PRIMING**

(B19c1) Prime all wood work to be (painted) (and) (enameled) with priming paint before or immediately after erection.

**(B19d) PAINT FINISH**

(B19d1) Over the priming coat, finish with

(B19d2) Two (2) coats of Lionoil Floor Enamel (Quick Drying). Allow not less than 4 hours to dry between coats.

(B19d3) Two (2) coats of Berrycraft House Paint.

(B19d4) Two (2) coats of Berrycraft Interior Finish (Gloss).

**(B19e) GRAINING**

**Note:** Particularly for the interior of soft wood sash to match hard wood interior trim.

(B19e1) Over the priming coat, give one coat of (Lionoil Colored) (Berrycraft House Paint) (Berrycraft Interior Finish (Gloss)) ground color over which, when thoroughly dry, apply one (1) coat of graining color combed to the desired effect.

(B19e2) Finish with

(B19e3) (Two (2)) (three (3)) coats of (Berryspar) (Liquid Granite Floor Varnish [Quick Drying] Gloss), the last coat rubbed to a dull finish. Allow not less than 24 hours (4 hours for Quick Drying) to dry between coats.

(B19e4) (One (1)) (two (2)) coats of Liquid Granite Floor Varnish Gloss finished with one (1) coat of Liquid Granite Floor Varnish (Dull) (Semi-gloss). Allow not less than 24 hours (4 hours for "Quick Drying") to dry between coats.

**(B19f) VARNISH FINISH**

(B19f1) Stain with (oil) (acid) stain. Allow from 24 to 36 hours to dry.

**Note:** Omit on natural finish.

(B19f2) Fill with paste wood filler. Allow from 24 to 36 hours to set hard.

**Note:** Omit on close-grain wood.

(B19f3) Over (stain) (and) (filler) apply a thin coat of (SDC-orange) (SDC-white) shellac and sand lightly.

(B19f4) Finish with

**Note:** Specifications below are listed in general order of durability or desirability, the highest grade first. Select that adapted to the particular work.

(B19f5) (Two (2)) (three (3)) coats of Berryspar. Allow not less than 8 hours to dry between coats.

(B19f6) (Two (2)) (three (3)) coats of Liquid Granite Floor Varnish Gloss (Quick Drying). Allow not less than 12 hours (4 hours for "Quick Drying") to dry between coats.

**Note:** Use the two above particularly where moisture must be guarded against. Use Liquid Granite wherever the hardest service is required.

(B19f7) (Two (2)) (three (3)) coats of Luxeberry Wood Finish Gloss. Allow not less than 12 hours to dry between coats.

**Note:** All of the above are in gloss varnish requiring rubbing for the finest finish.

(B19f8) (Two (2)) (three (3)) coats of Liquid Granite Quick Drying Varnish (Gloss) (Dull). Allow not less than 4 hours to dry between coats.

(B19f9) The last coat shall be rubbed to a dull finish.

**Note:** The gloss requires rubbing for the finest finish. The dull provides a semi-gloss or dull without rubbing.

(B19f10) (One (1)) (two (2)) coats of Liquid Granite Gloss finished with a coat of Liquid Granite Floor Varnish (Dull) (Semi-gloss) (Quick Drying). Allow not less than 12 hours to dry between coats.

(B19f11) (One (1)) (two (2)) coats of Luxeberry Wood Finish Gloss finished with one (1) coat of Luxeberry Wood Finish (Dull) (Semi-gloss). Allow not less than 12 hours to dry between coats.

**Note:** The above two provide a dull or semi-gloss finish without rubbing.

**(B19h) CLEAR SPRAYING LACQUER FINISH**

(B19h1) Stain with acid stain. Allow sufficient time to thoroughly dry.

**Note:** Omit on natural finish. Use only acid stains under lacquer.

(B19h2) Fill with paste wood filler. Allow from 24 to 36 hours to set hard.

**Note:** Omit on close-grain wood. Use only Pyroxylin Filler.

(B19h3) Over (stain) (and) (filler) apply a thin spray coat of Lionoil Clear. Allow not less than 24 hours to dry or completely oxidize before lacquer is applied.

(B19h4) Finish with

**Note:** Specifications below are listed in general order of durability or desirability, the highest grade first. Select that adapted to the particular work.

(B19h5) (Two (2)) (three (3)) coats of No. 507 Berryloid Clear Exterior, spray applied. Allow not less than 1 hour to dry between coats.

**Note:** The above particularly where severe wear or moisture must be guarded against.

(B19h6) (Two (2)) (three (3)) coats of No. 652 Berryloid Clear, spray applied. Allow not less than 1 hour to dry between coats.

(B19h7) The last coat shall be allowed to dry for at least 5 hours and shall then be rubbed to a dull finish.

**Note:** The above two are in gloss finish requiring rubbing for the finest finish.

(B19h8) (One (1)) (two (2)) coats of No. 652 Berryloid Clear finished with one (1) coat of (No. 653 Semi-gloss Berryloid Clear) (No. 653A Eggshell Flat Berryloid Clear) spray applied. Allow not less than 1 hour to dry between coats.

**Note:** Use where rubbing is impractical on carvings, mouldings, etc. Provides an eggshell or soft semi-gloss finish. Samples on request.

**(B19i) ENAMEL FINISH**

(B19i1) Over the priming coat, apply two (2) coats of Berry's Enamel Undercoat. Allow not less than 8 hours to dry between coats.

(B19i2) Finish with

**Note:** Specifications below are listed in general order of durability or desirability, the highest grade first. Select that adapted to the particular work.

(B19i3) (Two (2)) (three (3)) coats of Luxeberry Enamel Gloss.

(B19i4) (Two (2)) (three (3)) coats of Berrycraft Quick Drying Enamel.

(B19i5) The last coat shall be rubbed to a dull finish.

**Note:** The above two are in gloss enamel requiring rubbing for the finest finish.

(B19i6) (One (1)) (two (2)) coats of Luxeberry Enamel Gloss finished with one (1) coat of Luxeberry Enamel Eggshell.

(B19i7) (One (1)) (two (2)) coats of equal parts of Luxeberry Enamel and Berry's Enamel Undercoat.

**Note:** The above two provides an eggshell or soft semi-gloss finish without the expense of rubbing.



## (B20) PAINTING AND FINISHING OF INTERIOR PLASTER WALLS AND CEILINGS

*Note: See also (B15) and (B16).*

(B20a) The following interior plaster walls and ceilings shall be finished as specified below:

*Note: Here list items and state whether sand float or hard (putty coat) finish. Where there are a variety of classes or groups of work each requiring a different finish, precede each group with clause (B20a) and list separately followed by the particular specification which applies.*

*Note: Specifications below are listed in order of durability or desirability. Select that adapted to the particular work.*

(B20b) One (1) sizing coat consisting of one (1) part of Lionoil Clear to one (1) part of Berry's Enamel Undercoat applied with a (brush) (spray), over which apply (one (1)) (two (2)) coats of Berry's Enamel Undercoat, finished with (two (2)) (three (3)) coats of Luxeberry Enamel (Gloss) (Eggshell). Allow not less than 12 hours to dry between coats. Recoat flat spots appearing after first coat before the application of second coat.

*Note: For the highest class of enameled wall finish.*

(B20c) One (1) coat consisting of equal parts of Delitone and Delitone Thinner applied with a (brush) (spray) over which apply with a (brush) (spray) a finish coat consisting of Delitone reduced with 1½ pints of turpentine and ½ pint of Delitone Thinner to the gallon of Delitone. Allow not less than 24 hours to dry between coats. Recoat any flat spots appearing after first coat before the application of the second coat.

(B20d) One (1) sizing coat consisting of one (1) part of Lionoil Clear to one (1) part of Berryflat applied with a (brush) (spray), over which apply with a (brush) (spray) (one (1)) (two (2)) coats of full body Berryflat. Allow not less than 12 hours to dry between coats. Recoat any flat spots appearing after first coat before the application of the second coat.

(B20e) After the finish coat has set from 20 to 30 minutes, stipple with a stippling brush to a uniform mat finish.

*Note: Either of the above finishes takes an excellent stipple.*

(B20f) *Note: Where desired over-glazes, sponge-stipples, etc., may be added. If required, specify here.*

(B20g) One sizing coat consisting of one (1) part of Lionoil Clear to one (1) part of Berryflat applied with a (brush) (spray), over which apply with a (brush) (spray) one (1) two (2) coats of full body Berrycraft Interior Finish (Gloss). Allow not less than 12 hours to dry between coats. Recoat any flat spots appearing after first coat before the application of the second coat.

(B20h) (Two (2)) (three (3)) coats aluminum paint consisting of 1¾ lbs. of aluminum bronzing powder to the gallon of Berry Brother's Aluminum Paint Liquid No. 3 applied with a (brush) (spray).

*Note: An especially durable, cleanable, light reflecting surface for use in elevator shafts, boiler and fan rooms, etc., and industrial buildings.*

## (B21) PAINTING AND FINISHING OF RADIATORS, ETC.

(B21a) The following radiation (and exposed piping) shall be finished as specified below:

*Note: Here list items.*

(B21b) Apply with a (brush) (spray) one (1) coat of aluminum paint consisting of 1¾ lbs. of aluminum bronzing powder to a gallon of Berry Brothers' Aluminum Paint Liquid No. 3. Allow not less than 8 hours to dry.

*Note: Advocated to produce a clean smooth surface for enamel finish. This is often included under the Heating Specification and if so, omit here.*

(B21c) (Over the aluminum bronze coat) apply (one (1)) (two (2)) coats of Berry's Radiator Enamel. Allow not less than from 6 to 8 hours to dry between coats.

## (B22) PAINTING AND FINISHING OF INTERIOR WOOD FLOORS

(B22a) The following interior wood floors shall be finished as specified below:

*Note: Here list floors and name the wood to be finished. Where there are a variety of classes or groups of floors each requiring a different finish, precede each group with clause (B22a) and list separately followed by the particular specification which applies.*

### (B22b) PAINT FINISH

(B22b1) Prime the floors with Lionoil Colored priming paint over which apply two (2) coats of Lionoil Floor Enamel—Quick Drying. Allow not less than 8 hours to dry between the first and second coats and not less than 4 hours between the last two coats.

### (B22c) VARNISH FINISH

(B22c1) Stain with (oil) (acid) stain. Allow sufficient time to thoroughly dry.

*Note: Omit on natural finish.*

(B22c2) Fill with paste wood filler. Allow from 24 to 36 hours to set hard.

*Note: Omit on close-grain wood.*

(B22c3) Finish with

*Note: Specifications below are listed in general order of durability or desirability, the highest grade first. Select that adapted to the particular work.*

(B22c4) Apply one (1) coat of Lionoil Clear followed by (two (2)) (three (3)) coats of Liquid Granite Floor Varnish Gloss (Quick Drying).

(B22c5) The last coat shall be rubbed to a dull finish.

*Note: The above is gloss varnish requiring rubbing for the finest finish.*

(B22c6) Apply one (1) coat of Lionoil Clear followed by (one (1)) (two (2)) coats of Liquid Granite Gloss, finished with one (1) coat of Liquid Granite Floor Varnish (Dull) (Semi-gloss) (Quick Drying).

*Note: The above provides a dull or semi-gloss finish without rubbing.*

### (B22d) WAX FINISH

(B22d1) Stain with (oil) (acid) stain. Allow sufficient time to thoroughly dry.

*Note: Omit on natural finish.*

(B22d2) Fill with paste wood filler. Allow from 24 to 36 hours to set hard.

*Note: Omit on close-grain wood.*

(B22d3) Over the (stain) (and) (filler) apply a thin coat of (SDC-orange) (SDC-white) shellac and sand lightly.

(B22d4) Over shellac apply two (2) coats of Berrywax, each polished hard with a weighted floor brush, or Berrycraft Liquid Wax—three (3) coats.

### (B22e) OIL FINISH

(B22e1) Apply (two (2)) (three (3)) coats of Lionoil Clear with a (brush) (mop). Allow not less than 12 hours to dry between coats.

*Note: Floors finished with Lionoil Clear retain their natural color and will not darken as with linseed oil. It costs no more than the application of hot linseed oil and turpentine. It penetrates deeply, gives unusual service and is waterproof.*



# *Berrycraft*

## FINISHES



*Since 1858*

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